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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/717,521	11/21/2000	Herman Rodriguez	A US9-2000-0560-US1	1827

7590 07/21/2003

IBM Corporation
Intellectual Property Law Dept.
11400 Burnet Road 4054
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EXAMINER

BROWN, VERNAL U

ART UNIT	PAPER NUMBER
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2635

DATE MAILED: 07/21/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/717,521

Applicant(s)

RODRIGUEZ ET AL.

Examiner

Vernal U Brown

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 21 November 2000.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-78 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-78 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 21 November 2000 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 2.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

The application of Herman Rodriquez for Electronic Key System, Apparatus, and Method filed November 21, 2000 has been examined. Claims 1-78 are pending.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1, 3-5, 9, 13-15, 18-20, 22, 24, 26-29, 31-33, 37, 41-43, 46, 48, 50, 52, 54-55, 62, 71, 77-74, 77-76, 77-78 are rejected under 35 U.S.C. 102(b) as being anticipated by Brinkmeyer et al. U.S Patent 5838251.

Regarding claim 1, Brinkmeyer et al. teaches a method of operating an electronic locking device using a wireless communication device (col. 10 lines 16-19) and also shown in figure 3, comprising:

receiving a master key code (encoded data) from a master key supplier (20) and generating a secondary key code from the master key code and transmitting the secondary key code to the wireless communication device of the vehicle (col. 6 lines 45-60) and the secondary key code which is obtained by decoding the encoded data from the key supplier is used by the wireless communication device to operate the electronic locking device of the vehicle (col. 6 lines 61-66).

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Regarding claims 3 and 31, Brinkmeyer et al. teaches the master code is received by a network as shown in figure 3.

Regarding claims 4 and 32, Brinkmeyer et al. teaches sending a master key code request to the master key supplier and the master key request identifying a product code of the electronic locking device (col. 6 lines 2-5).

Regarding claims 5 and 33, Brinkmeyer et al. teaches the electronic locking device using a wired communication link in figure 6.

Regarding claims 9 and 37, Brinkmeyer et al. teaches the secondary code is transmitted using a wireless link (col. 12 lines 62-67).

Regarding claims 13, 41, 62, 71 Brinkmeyer et al. teaches the secondary key code which is obtained by decoding the encoded data from the key supplier is used by the device to operate the electronic locking device of the vehicle (col. 6 lines 61-66).

Regarding claims 14 and 42, Brinkmeyer et al. teaches transmitting the secondary key code to the electronic locking device at a remote time from transmitting the secondary key code to the wireless communication device (col. 6 lines 45-56).

Regarding claims 15 and 43, Brinkmeyer et al. teaches authenticating the key code and transmitting a command to operate the electronic locking device if the key code is authentic (col. 6 lines 65-67).

Regarding claims 18 and 46, Brinkmeyer et al. teaches a comparison of the key code to information store in the key code table (col. 2 lines 20-24).

Regarding claims 20 and 48, the wireless key device is conventionally own by the user.

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Regarding claims 22 and 50, Brinkmeyer et al. teaches maintaining a record of the key codes used for accessing the electronic locking device (col. 45-49).

Regarding claims 24 and 52, Brinkmeyer et al. teaches authenticating the key codes includes determining the activation/expiration time of the key code (col. 11 lines 37-50).

Regarding claims 26 and 54, Brinkmeyer et al. teaches polling the electronic locking device and receiving status information from the electronic locking device (col. 10 lines 47-47).

Regarding claims 27 and 55, Brinkmeyer et al. teaches the status information includes the current status of the lock (col. 10 lines 47-54).

Regarding claim 28, Brinkmeyer et al. teaches operating the electronic locking device based on the received status information of the programming of the spare key (col. 10 lines 50-55).

Regarding claims 29 and 77-78, Brinkmeyer et al. teaches a method of operating an electronic locking device using a wireless communication device (col. 10 lines 16-19) and also shown in figure 3, comprising:
receiving a master key code (encoded data) from a master key supplier (20) and generating a secondary key code from the master key code and transmitting the secondary key code to the wireless communication device of the vehicle (col. 6 lines 45-60) and the secondary key code which is obtained by decoding the encoded data from the key supplier is used by the wireless communication device to operate the electronic locking device of the vehicle (col. 6 lines 61-66).

Regarding claims 56-57 and 75-76 Brinkmeyer et al. teaches a method of operating an electronic locking device using a wireless communication device (col. 10 lines 16-19) and also shown in figure 3, comprising:

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receiving a master key code (encoded data) from a master key supplier (20) and generating a secondary key code from the master key code and transmitting the secondary key code to the wireless communication device of the vehicle (col. 6 lines 45-60) and the secondary key code which is obtained by decoding the encoded data from the key supplier is used by the wireless communication device to operate the electronic locking device of the vehicle (col. 6 lines 61-66). Brinkmeyer et al. further teaches a computer (2) and computer medium (1) for operating the electronic locking device.

Regarding claim 64-65, 73-74 Brinkmeyer et al. teaches receiving a delete command and deleting the secondary key code from storage and the delete command is received from the key supplier (col. 13 lines 22-25).

Regarding claim 66, Brinkmeyer et al. teaches a wireless communication apparatus for operating an electronic locking device, comprising:
means for requesting a secondary key code from a (programming device) key code supplier (col. 6 lines 55-57), means for receiving the secondary key code in the form of a spare key (50) and means for transmitting the secondary key code to the locking device (col. 6 lines 61-65).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

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teaches a key which stores information including an activation/expiration portion, a time of issue portion and a time of last use portion (col. 4 lines 52-59).

It would have been obvious to one of ordinary skill in the art to for the secondary key to includes an activation/expiration portion, a time of issue portion and a time of last use portion in Brinkmeyer et al. as evidenced by Hyatt, Jr. et al. because Brinkmeyer et al. teaches the limiting of access by ensuring that only persons with an authorized key are able to gain access to a locking mechanism and Hyatt, Jr. further teaches limiting accesses by including an activation/expiration portion, a time of issue portion and a time of last use portion in the key code.

Claims 6-7 and 34-35 are rejected under 35 U.S.C. 103(a) as being unpatentable over Brinkmeyer et al. U.S Patent 5838251 in view of Gonzales et al. U.S Patent 5936544.

Regarding claims 6-7 and 34-35, Brinkmeyer et al. is silent on teaching transmitting the secondary code to the locking device includes transmitting the secondary key code based on a network address. Gonzales et al. in an art related wireless access system teaches the transmission of an access code based on the network address of the locking device (col. 5 lines 2-8).

It would have been obvious to one of ordinary skill in the art to transmit the secondary code to the locking device including transmitting the secondary key code based on a network address in Brinkmeyer et al. as evidenced by Gonzales et al. because Brinkmeyer et al. suggests transmitting identifying means of the locking mechanism and Gonzales et al. teaches transmitting identifying means of lock mechanism which include transmitting the network address of the locking mechanism.

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Claims 8, 36, 59, 68 are rejected under 35 U.S.C. 103(a) as being unpatentable over Brinkmeyer et al. U.S Patent 5838251 in view of Larson U.S Patent 5815557.

Regarding claims 8, 36, 59, and 68, Brinkmeyer et al. teaches a method of operating an electronic locking device using a wireless communication device (col. 10 lines 16-19) but is silent on teaching the wireless communication device is one of a personal digital assistant, a two-way pager, a mobile telephone, and a lap top computer. Larson in an art related invention in the same field of endeavor of electronic key teaches the use of a pager as a key (col. 7 lines 62-66).

It would have been obvious to one of ordinary skill in the art for the wireless communication device is one a two-way pager in Brinkmeyer et al. as evidenced by Larson because Brinkmeyer et al. suggests a method of operating an electronic locking device using a wireless communication device and Larson teaches the use of a pager as a key device.

Claim 10-11, 25, 38-39, 53, 60-61, 69, 70 are rejected under 35 U.S.C. 103(a) as being unpatentable over Brinkmeyer et al. U.S Patent 5838251 in view of Kucharczyk et al. U.S Patent 6570488.

Regarding claims 10-11, 38-39, 60-61, 69, 70 Brinkmeyer et al. teaches transmitting the key code to the key device (col. 12 lines 62-67) but is silent on teaching transmitting the secondary key code as an attachment to an electronic mail. Kucharczyk et al. in an art related invention in the same field of endeavor or electronic lock teaches attaching key code to an electronic mail (col. 9 lines 55-59).

It would have been obvious to one of ordinary skill in the art to transmit the secondary key code as an attachment to an electronic mail in Brinkmeyer et al. as evidenced by Kucharczyk et al. because Brinkmeyer et al. suggests transmitting the key code to the key device and

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Kucharczyk et al. teaches a method of transmitting a key code which includes transmitting the key code as an attachment to an electronic mail.

Regarding claim 25 and 53, Brinkmeyer et al. teaches the master code is received by a network as shown in figure 3 but is silent on teaching the network is the internet. Kucharczyk et al. in an art related invention in the same field of endeavor of electronic lock teaches a locking mechanism communicating over the internet (col. 2 lines 61-64).

It would have been obvious to one of ordinary skill in the art for the master code to be received by the internet network in Brinkmeyer et al. as evidenced by Kucharczyk et al. because Brinkmeyer et al. suggests the master code is received by a network and Kucharczyk et al. teaches a locking mechanism communicating over the internet and transferring the key code over the internet.

Claim 12, 40 are rejected under 35 U.S.C. 103(a) as being unpatentable over Brinkmeyer et al. U.S Patent 5838251 in view of Henderson et al. U.S Patent 4947163.

Regarding claims 12 and 40, Brinkmeyer et al. teaches the programming of a locking device (col. 14 lines 42-46) but is silent on teaching confirming reprogramming of the electronic locking device with a confirmation message. Henderson et al. in an art related invention in the same field of endeavor of electronic security teaches transmitting of a confirmation messages after the successful completion of data transfer between the key and the electronic locking device (col. 10 lines 39-45).

It would have been obvious to one of ordinary skill in the art to confirm reprogramming of the electronic locking device with a confirmation message in Brinkmeyer et al. as evidenced

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by Henderson et al. because Brinkmeyer et al. suggests the reprogramming of a locking device and Henderson et al. teaches transmitting of a confirmation messages after the successful completion of data transfer between the key and the electronic locking device.

Claim 16-17 and 44-45 are rejected under 35 U.S.C. 103(a) as being unpatentable over Brinkmeyer et al. U.S Patent 5838251 in view of Henry et al. U.S Patent 5774059.

Regarding claims 16-17 and 44-45, Brinkmeyer et al. is silent on teaching determining if a number of attempts to operate the electronic locking device exceeds a threshold within a predetermined period of time and placing the electronic lock in a safety mode which is one of a slow down mode and a freeze mode. One skilled in the art recognizes that it is convention practice to determine if a number of attempts to operate the electronic locking device exceeds a threshold within a predetermined period of time and placing the electronic lock in a safety mode which is one of a slow down mode and a freeze mode as evidenced by Henry et al. (col. 12 lines 18-24).

It would have been obvious to one of ordinary skill in the art to determining if a number of attempts to operate the electronic locking device exceeds a threshold within a predetermined period of time and placing the electronic lock in a safety mode which is one of a slow down mode and a freeze mode in Brinkmeyer et al. as evidenced by Henry et al. because Brinkmeyer et al. teaches a locking device which requires a correctly coded key and one skilled in the art recognizes that it is convention practice to determine if a number of attempts to operate the electronic locking device exceeds a threshold within a predetermined period of time and placing the electronic lock in a safety mode which is one of a slow down mode and a freeze mode as evidenced by Henry et al.

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Claim 23 and 51 are rejected under 35 U.S.C. 103(a) as being unpatentable over Brinkmeyer et al. U.S Patent 5838251 in view of Thompson, Jr. et al. U.S Patent 5978483.

Regarding claims 23 and 51, Brinkmeyer et al. teaches generating a secondary code from a master key code by decoding an encoded key code (col. 6 lines 61-66) but is silent on teaching generating a secondary key code from the master key code using a random number generation. Thompson, Jr. et al. in an art related security system teaches generating a key code using a random number generator (col. 2 lines 55-57) in order to securely encrypt the key code.

It would have been obvious to one of ordinary skill in the art to generate a secondary key code from the master key code using a random number generator in Brinkmeyer et al. as evidenced by Thompson, Jr. et al. because Brinkmeyer et al. suggests encoding the key code and Thompson, Jr. et al. teaches encoding the key code using a random number.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Vernal U Brown whose telephone number is 703-305-3864. The examiner can normally be reached on M-Th, 8:30 AM-6:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Horabik can be reached on 703-305-4704. The fax phone numbers for the organization where this application or proceeding is assigned are 703-308-6743 for regular communications and 703-308-6743 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-305-3900.

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Vernal Brown

July 13, 2003



BRIAN ZIMMERMAN
PRIMARY EXAMINER